Application No.: 10/595,828 Paper Dated: July 31, 2008

Attorney Docket No. 132220.00101

LISTING OF CLAIMS

This listing of claims shall replace all prior versions and listings of claims in the application.

Claims:

- (Currently Amended) A polymer composition for encapsulating or carrying a one or more chemical and/or biological agents, comprising either a polyamine or oxirane composition or mixture thereof.
- (Currently Amended) <u>The</u> A composition as elaimed in of claim 1, wherein the polymer composition is cationic.
- (Currently Amended) The A composition as claimed in either of claim
 1 or 2, wherein the oxirane composition comprises is selected from (chloromethyl) oxirane,
 (bromoethyl) oxirane or a mixture mixtures thereof.
- (Currently Amended) The A composition as olaimed in any preceding elaim of claim 1, wherein the composition comprises[[.]];
 - (a) 1,6-hexane diamine N-(6-aminohexyl);
 - (b) 1H-imidazole chloro methyl oxirane copolymer; and optionally (c) water
 - (Cancelled).
- (Currently Amended) The A composition as elaimed in either claim 4
 or 5 of claim 4, wherein the 1.6-hexane diamine N-(6-aminohexyl) is mixed with comprises
 chloromethyl oxirane.
- (Currently Amended) <u>The A composition as elaimed in of claim 6 1</u>.
 wherein the composition comprises the ingredients in the following quantities <u>comprising</u>:

 (a) 25-45 % 1.6-hexane diamine N-(6-aminohexyl)-with ehloromethyl oxirane;
 - (b) 5-25 % 1H-imidazole chloro methyl oxirane copolymer-in-water; and (e) 40-60 % water.
 - 8. (Cancelled).
- (Currently Amended) The A composition as claimed in either-claim-7
 or-8 of claim 4, wherein the 1H-imidazole chloro methyl oxirane copolymer is present in a
 solution with water.

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- (Currently Amended) The A composition as elaimed in of claim 9, wherein the concentration of the 1H-imidazole chloro methyl oxirane copolymer in water is in the range of is 30% to 50% in of the solution.
- (Currently Amended) The A composition as claimed in any preceding elaim of claim 1, wherein the polymer composition aets as is formed into a film to which the one or more chemical and/or biological agents may be are applied.
- (Currently Amended) The A composition as claimed in any preceding claim of claim 11, wherein the agent one or more chemical and/or biological agents are is a non-water soluble compound.
- 13. (Currently Amended) The A composition as claimed in any of claims 4 to claim 11, wherein the agent one or more chemical and/or biological agents are may be selected from one of the following agents or more of: dyes, perfumes, cosmetics, detergents, fragrances, pharmaceutical preparations, pheromones, insect repellents, anti-microbial agents. enzymes and micro-organisms.
- (Currently Amended) The A composition as claimed in any preceding claim of claim 11, wherein the chemical and/or biological agent is up to 50 microns in size.
- (Currently Amended) The A composition as claimed in any preceding claim of claim 11, wherein the composition and/or agent further comprises an additive comprising one or more additives.
- 16. (Currently Amended) The A composition as elaimed in any of elaims
 110 claim 11, wherein the one or more chemical and/or biological agents agent is are
 dissolved or dispersed in a solvent.
- 17. (Currently Amended) A method of for coating or wrapping an eneapsulated a chemical or biological agent using a composition claimed in any preceding claim. comprising contacting the eneapsulated chemical or biological agent with the a composition of a polyamine, oxirane or mixture thereof.
- 18. (Currently Amended) The A method of coating or wrapping as elaimed in claim 17, wherein the coating or wrapping method is carried out at temperatures in the range of 15 40°C at a pH in the range of 5.5 7.5.
- 19. (Currently Amended) The A method of coating or wrupping as claimed in either claim 17 or claim 18, wherein the method is performed using a comprising combining the chemical or biological agent and the composition of a polyamine or oxirane or mixture thereof using a high speed stirrer.

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to 10

20. (Currently Amended) A substrate <u>comprising</u> at least <u>a partial coating of partially coated or wrapped with a composition of a polyamine, oxirane or mixture thereof as claimed in any of claims 1 to 11 or produced by the method as claimed in any of claims 1?</u>

- 21. (Currently Amended) The A substrate as claimed in of claim 20, wherein the substrate is a cellulose based material, and/or protein based material or combinations thereof-and/or an eneapsulated chemical or biological agent.
- 22. (Currently Amended) A method of for dyeing <u>fabric fabries using a composition as elaimed in any of claims 1 to 11, wherein the composition is used in conjunction with comprising contacting the <u>fabric with a dye encapsulated in a composition of a polyamine</u>, oxirane or mixture thereof.</u>
- 23. (Currently Amended) The A method of dyeing fabries as claimed in claim 22, wherein the encapsulated dye further comprises one or more additional compounds selected from salt, soda, wetting agents, leveling agents or dispersing agents are used to assist the action of the dye.
 - (Cancelled).
- 25. (Currently Amended) The A method of dyeing fabries as claimed in any of claims claim 22 to 24. further comprising wherein after the application of the dye to the fabrie; treating the fabric is treated with an after treatment after the step of contacting.
- 26. (Currently Amended) The A method of dyeing-fabries us-claimed in any of claims claim 22 to 24, wherein the composition is used to comprising pre-treating pre-treat the fabric prior to the application of applying the dye.
- 27. (Currently Amended) The A method of dyeing fabries as claimed in any of claims claim 22 to 26, wherein the composition and/or the agent is applied to a surface step of contacting is carried out by one or more of the following techniques: technique selected from spraying, printing, padding or exhaustion techniques.
- (Currently Amended) <u>The Amethod of dyeing fabries as claimed in any of claims claim</u> 22 to 27, wherein the method comprises comprising the steps of:
 - (a) immersing the fabric in water;
 - (b) heating the water to a temperature of between 15 30°C;
 - (e) cleaning the fabric so as to remove most contaminants;
 - (d) adjusting the pH of the liquid to between 8 10;
 - (e) adding the composition to the water to form a liquid:
 - (f) heating the liquid to a temperature of between 40 80°C;

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- (g) draining the liquid and rinsing the fabric:
- (h) adjusting the pH of the liquid to between 5 8 if necessary:
- (i) adding a colourant colorant; and
- (j) heating the liquid to a temperature in the range of 50°C-70°C; (k) optionally, after-treating the labric; and (1) draining the liquid from the fabric.
- 29. (Currently Amended) The A method of dyeing fabrics as claimed in claim 28, wherein step (j) is preceded with the additional step of adding a cellulase enzyme to the liquid is performed after the step of adding a colorant.
- 30. (Currently Amended) The A method of dyeing fabries-as-claimed in either claims claim 28 or 29, wherein the colourant colorant is selected from one or more of the following colourants: colorant selected from reactive dyes, direct dyes, acid dyes and pigments.
- (Currently Amended) The A method of dyeing fabries as claimed in
 any of claims 22 to 30 claim 28, wherein the method further comprises the addition of adding
 a suitable handle modifier.